RESEARCH ARTICLE

Humanitarian policymaking as networked governance: social network analysis of the Global Compact on Refugees

Aaron Clark-Ginsberg[1*], Jay Balagna[2], Cyd Stacy Nam[3,4], Maya Casagrande[4] and Olivia Wilkinson[4]

Abstract

Humanitarian policymaking is a form of 'networked governance,' involving many different stakeholders working in parallel to influence each other and to shape policy agendas. This article uses social network analysis (SNA), a research technique used to understand complex structures of relations between stakeholders, to begin to understand policymaking from this networked governance perspective. To do so, we examine one of the most significant refugee policy processes in recent history, the 2016–2018 efforts to formulate and adopt the Global Compact on Refugees (GCR). Starting with the policy network of one stakeholder involved in GCR, the Joint Learning Initiative on Faith and Local Community, we survey 24 representatives of organizations involved in the GCR policymaking process. In doing so, we identify the United Nations High Commissioner for Refugees, World Vision, and the International Council of Voluntary Agencies as three influential stakeholders in this network of mostly international NGOs. We note limited engagement of local and private sector actors but argue that this may or may not be problematic from a perspective of networked governance and equity. Through examining the Joint Learning Initiative policy network, this article offers new evidence concerning who is influential in international refugee policymaking space and contributes to an understanding of humanitarian action as a networked governance enterprise. We also show, as proof of concept, the ways SNA can be used to gain an understanding of the dynamics of policymaking systems and the patterns of influence within them.

Keywords: Refugee policy, Social network analysis, Global Compact on Refugees, Networked governance, Mass migration, Faith-based organizations

Introduction

Following the New York Declaration for Refugees and Migrants in 2016 that affirmed the need for United Nations member states to share responsibility for people on the move, the United States High Commissioner for Refugees (UNHCR) finalized the Global Compact on Refugees (GCR) in December 2018. This momentous compact operationalizes the international community's commitment to enhancing the efficiency and sustainability of refugee response, through which signatories pledged to work toward a more predictable and equitable sharing of responsibility among governments, international organizations, and other stakeholders. It will, ostensibly, shape efforts for refugees and forced migrants for years to come (UNHCR, 2022).

As with other recent global humanitarian policy processes, such as the 2016 World Humanitarian Summit, UNHCR endeavored to make this process one of inclusion and participation. To do so, local and international nongovernmental organizations, state actors, and individuals were invited to participate in five thematic discussions, six consultations, and submitted hundreds of written contributions over the course of 2 years (UNHCR, 2022).

*Correspondence: aclarkgi@rand.org

[1] RAND Corporation, Santa Monica, CA, USA
Full list of author information is available at the end of the article

With this focus on inclusion, the GCR offers a critical opportunity that is the purpose of this article: a chance to gain insight into how actors engaged in global humanitarian policy processes function collectively as a form of networked governance. Networked governance refers to a form of decision-making where decisions are made collectively, involving a wide range of participants (Stoker, 2006). Networked governance is often contrasted with other, more top-down decision-making processes, such as those of a strong and centralized state, and reflects the broader shifts in public policy from government to governance (Stoker, 2006; Kapucu, 2014). Using this conceptualization of the concept, humanitarian action—and disaster risk management more broadly (Berthod et al. 2017; Bixler et al. 2020; Howes et al. 2015; Moynihan, 2009)—is a quintessential example of networked governance. Its policymaking is frequently complex, involving many different actors collectively shaping policy, crafting a policy agenda, and setting up programs. Implementation of policy via humanitarian action and related activities occurs largely in situations where the central authorities of the state are weakened. This includes contexts where networked governance is the norm, such as in situations of migration (Oomen, 2020), certain forms of disaster response (Bisri, 2016; Cachia and Holgado Ramos, 2020; Mutebi et al. 2020; Ramalingam et al. 2008), and disaster risk reduction in many informal settlements (Clark-Ginsberg et al. 2022).

Our specific focus of the article, understanding humanitarian *policymaking* from a networked perspective, is crucial for realizing the benefits of the humanitarian system. This is because humanitarian policies function to galvanize resources, coordinate response, and establish norms of operation (Roepstorff, 2020). An example comes from the 2016 World Humanitarian Summit, which brought about the "New Way of Working," a push to involve greater collaboration between the humanitarian and development sectors, as well as the "Grand Bargain" to foster the localization agenda, designed to shift power and resources toward local actors from the Global South (Lie, 2020; Melo Zurita et al. 2015). Outputs of the Summit led to shifts in how major governmental and nongovernmental humanitarian stakeholders allocate resources and engage with partners, such as the United States Agency for International Development, which aims to allocate 25% of its funding to local organizations (Saldinger, 2021).

If done right and effectively leveraged, networked governance arrangements can result in equity improvements. Equity refers to "the absence of unfair, avoidable or remediable differences among groups of people," (WHO, n.d.). It can be further defined in terms of process, with an eye toward ensuring all stakeholders are fairly represented in decision-making processes; and outcome, with an eye toward ensuring the results of policies do not unfairly favor some over others. Networked governance can help ensure stakeholders have fair and meaningful say in policymaking, helping to achieve equity in process, and ensuring the policies that result maximize the positive and minimize the negative impacts for those most in need, contributing to equity in outcome.

However, developing an understanding of humanitarian policymaking from a perspective of networked governance is challenging. One barrier is methodological. Unlike in top-down forms of decision-making, where it is critical to understand the aims and goals of the main decision-maker, the conditions of networked governance systems mean it is important and extremely challenging to understand the broad set of stakeholders shaping change (Lassa, 2011, Clark-Ginsberg et al. 2022). A second challenge is empirical. While humanitarian action as a networked endeavor is now fairly well understood and researched, there exists limited work in the academic literature on the networked nature of humanitarian policymaking. For humanitarian policymakers, these challenges can contribute to difficulties in crafting policy. Especially in settings such as the GCR policymaking process—characterized by its relatively compact timeline and broad actor diversity—the lack of coordination can deeply affect the efficiency and effectiveness of processes designed to influence policymaking.

To understand networked governance policymaking through the activities of the GCR, we conducted a social network analysis (SNA) of an international network of researchers and practitioners interested in research on religions, humanitarianism, and development—the Joint Learning Initiative on Faith and Local Communities (JLI)—in its efforts to influence the GCR (JLI, 2022). SNA has several benefits for studying networked governance. It can be used to understand complex structures of relations (or 'edges') between stakeholders ('nodes') (Maldonado, 2017; Wasserman and Faust, 1994)—in this case the relationships between stakeholders involved with the JLI in developing the GCR. The visual representation of complex systems that social network analysis can provide are useful for gaining a holistic overview of how systems function and relate. Researchers can also employ several statistical techniques to understand nodes and the network of which they are a part. As a way of systematically assessing and visualizing the key organizations in a network, as well as their linkages and pathways of influence, it can be used to identify key stakeholders in networked governance contexts.

It is for these reasons that SNA is a growing technique in the field of policy studies, paralleling the hollowing out of the state and shifts towards governance (Kapucu

et al. 2017). By conceptualizing systems as interdependent nodes and edges, social network analysis is suitable for the analysis of subjects in a multipolar, polycentric, and complex world. Indeed, while it has not yet been deployed to examine humanitarian policymaking networks, SNA has been used to understand other humanitarian issues such as mass migration (Lubbers et al. 2020), disaster response (Bisri, 2016; Cachia and Holgado Ramos, 2020; Trias and Cook, 2022), disaster recovery (Trias et al. 2019; Clark-Ginsberg, 2020), and disaster risk reduction (Trias et al. 2019; Clark-Ginsberg, 2020).

JLI and its members were involved in the GCR policy processes in several ways. As part of its participation in the debates during the 2-year period between the New York Declaration and the adoption of the GCR, JLI convened a hub to influence the Compact—the Refugees and Forced Migration Learning Hub—focused on refugees and forced migration. The hub met in London and Geneva in early 2018 to develop joint recommendations on the role of local faith actors in refugee response based on prior scoping reports (see Wilkinson and Ager (2017) for a scoping study on the topic). "Local faith actors" were defined as local faith communities, faith networks, religious leaders, and local and national faith actors (El Nakib and Ager, 2015). The resulting recommendations were submitted to the UNHCR through the consultation process, as well as to a global network of non-governmental organizations focused on humanitarian action, the International Council of Voluntary Agencies.

The JLI is a useful case as it is an organization functioning as a network of faith and non-faith humanitarian actors with links across the humanitarian system. JLI members represented the major faith actors involved in the humanitarian policymaking process at the GCR. Despite the humanitarian system having a broadly secularized orientation (Wilkinson, 2019, 2018), faith actors engage in humanitarian activities centered on both the delivery of vital humanitarian assistance and participation in humanitarian policy processes. They are fully integrated into the major networking processes around policy development and mostly operate in an indistinguishable fashion from non-faith actors. The JLI case allows a focused sample for this SNA analysis while still demonstrating the wide-reaching network of faith and non-faith actors involved in the GCR policymaking process.

Focusing on faith actors offers additional layers of interest for study. First, it demonstrates how these faith actors influence each other, across faiths and denominations, while also showing how faith actors integrate and work with non-faith actors for humanitarian policymaking. Second, the GCR aimed to shift to a "whole-of-society" approach, recognizing different types of actors. This

SNA helps understand the ways large umbrella organizations of different religions and denominations—reaching sizes of tens of millions, in the cases of the Lutheran World Federation and Anglican Communion, to around 600 million in the case of the World Evangelical Alliance—represent their own members' interests in international platforms. Such international platforms include the GCR policy process and the aforementioned "whole-of-society" approach that includes "faith-based actors," as stated in the final GCR.

By conducting an SNA on JLI and its members' work related to the GCR, we provide insight into the influence of, and interactions between, key policymakers. This includes how the network can play a critical role in future policy and decision-making processes and what networked governance and policymaking look like in practice. Furthermore, as with other SNA studies (Vanderelst, 2015), our analysis can serve as the foundation for additional research, with potential future work extending the analysis beyond organizations, governments, and institutions to understand which individual people influence the network the most.

In what follows, we describe our methods, including our sampling procedures and techniques for data collection and analysis. We then present the results of our study before concluding with a discussion on implications for researchers and policymakers.

Methods: social network analysis and the GCR

There is no single approach or "recipe" for an SNA study (Wasserman and Faust, 1994); instead, like all other forms of research, SNA involves a series of design choices and tradeoffs that must be navigated when answering the research questions. In our study, we undertook a similar approach to that used by Trias et al. (2019) and Clark-Ginsberg (2020) in their studies of disaster risk reduction networks, starting with (1) sampling, (2) data collection, and (3) analysis and development of results.

Sampling

We began by developing our data sampling procedures. Since our aim was to identify influential organizations or actors involved in developing refugee and migration policy within JLI's network, our sample consisted of organizations or actors working with JLI and involved in shaping and contributing to GCR policy process. Our sample did not include the entire set of stakeholders involved in the GCR since our study's focus was on a subset of stakeholders involved in the GCR: JLI and its partners. We defined organizations or actors as any group contributing to policy processes at the UN, regardless of sector or whether they have consultative status with the body.

Data collection

Next, we collected and prepared data. Many different sources of data can be used for SNA, including secondary documentary data or primary qualitative and quantitative data, such as interviews and surveys. We conducted surveys to collect data since they can be designed explicitly for the study at hand, which can provide targeted and consistently formatted data. In total, we surveyed 24 respondents; the respondents were persons involved in refugee policy making processes and associated with JLI, typically staff members of humanitarian organizations in advocacy or policy roles. The survey contained two questions, both of which were focused on whether an organization influenced another specific organization's international refugee policy:

1. Please list the 10 organizations that most influence your organization's approach to international policy related to forced migration and refugees.
2. Rate each of these organizations on a scale of 1–5, where one is the least influential and five is the most influential.

Analysis and development of results

Once we collected this survey data, we analyzed it to develop our results. We created a weighted and directed SNA network using the results from the two questions: the organizations that respondents listed in the first question were used to create the nodes and edges in our SNA network, while their ratings of influence in the second question were used to weight those edges. We used Gephi, a program widely used for analyzing and visualizing social network analysis data, to conduct analysis and develop visualizations of this network (Bastian et al. 2009).

Because the goal of our study was to better understand the different organizations working together to shape the GCR, we used three node-level centrality measures—out degree, eigenvector, and betweenness—to understand the positionality of these organizations, since these centrality measures are useful for understanding how specific notes operate within a broader network (Hanneman and Riddle, 2005).

Out degree is the edges flowing from a single node. Nodes with high out degree show a breadth of organizational types involved in global refugee work. Organizations identified by our respondents as influencers are those with higher out degree scores, and are captured in two ways, out degree, the identification of an organization by respondent and weighted out degree, and the respondent's 1–5 scale ratings of the organization.

Eigenvector measures the strength of a node's connections to other nodes, weighted by the centrality of each adjacent node. This measure can help identify which nodes may have influence over other nodes (Borgatti et al. 2018), making it useful for identifying which actors are peripheral and which are core players in the GCR refugee policymaking network. For example, organizations with high eigenvector centralities played a major role in shaping GCR policy discussions while organizations with lower eigenvector centralities had less impactful roles.

Betweenness centrality measures how often a node appears on the shortest paths between nodes in a network. Nodes with high betweenness centrality are the connectors and gatekeepers of a network (Borgatti et al. 2018).

Humanitarian action is frequently framed as a multi-level and multi-stakeholder endeavor (Walker and Maxwell, 2014; Barnett, 2013). To gain a better understanding of the stakeholders within the GCR policy network and their roles, we characterized them by their level and type. Level designations were used for whether organizations were local, national, regional, or international in their focus. Type included public, private, civil society, research, UN, and "network" organizations with a primary focus on facilitating and connecting other stakeholders together and facilitating engagement. To understand the religious elements of the network and how religiously oriented the network was, we also identified whether the organizations had a faith-based mandate.

The visual representation of complex systems that social network analysis provides can be useful for gaining a holistic overview of the ways systems function and how components of those systems relate to each other. To visualize data, we used the ForceAtlas algorithm, a force-directed layout that simulates a physical system to spatialize a network, where nodes repulse each other and edges attract each other (Jacomy et al. 2014). ForceAtlas was selected because it is designed for spatializing smaller networks and focuses on quality and high-grade visualizations over performance and speed. The sizes and shades of nodes and edges were weighted by their importance as articulated in the survey's second question focused on influence.

Results: GCR as a networked set of policy processes

The analysis included a total of 24 survey responses, shown in Table 1. The list of organizations surveyed illustrates the range of stakeholders involved in crafting international refugee policy with the JLI: a mix of faith-based and non-faith-based international NGOs, as well as transnational faith-based umbrella organizations, research organizations, and UN agencies. Absent,

Table 1 The 24 respondents surveyed for the study

Survey respondents			
Stakeholder	**Level**	**Type**	**Faith-based?**
ACT Alliance	International	Civil society	x
Anglican Communion	international	Civil society	x
Caritas Internationalis	International	Civil society	x
Catholic Agency for Overseas Development	International	Civil society	x
Catholic Charities	International	Civil society	x
Catholic Relief Services	International	Civil society	x
Center for Migration Studies	International	Research	x
Christian Aid	International	Civil society	x
Global One	International	Civil society	x
InterAction	International	Civil society	
International Catholic Migration Commission	International	Civil society	x
International Council of Voluntary Agencies	International	Civil society	
International Rescue Committee	International	Civil society	
Islamic Relief Worldwide	International	Civil society	x
Jesuit Refugee Service USA	International	Civil society	x
Lutheran World Federation	International	Civil society	x
Oxfam	International	Civil society	
Salvation Army International	International	Civil society	x
Save the Children	International	Civil society	
UN Children's Fund (UNICEF)	International	UN	
University College London's Migration Research Unit	International	Research	
World Evangelical Alliance	International	Civil society	x
World Relief	International	Civil society	x
World Vision International	International	Civil society	x

however, were members of the private sector as well as any direct representation of local and national actors, though these actors were indirectly represented by umbrella bodies. Categorized by level, all organizations were international; categorized by type, most (21) were civil society while the rest were a mix of UN (1), and research (2). Seventeen of the organizations were faith-based while seven were not.

These 24 organizations identified a total of 119 stakeholders making up the global refugee policy network in which they operate, which they rated on a five-point scale (survey question 2). Table 2 summarizes the level, type, and faith focus of these identified stakeholders. As the figure shows, the network consists of a mixture of organizations by level, with heavy representation of international- and national-level entities (85 international, 71.4% of the total; and 29 national, 24.4% of the total) and a limited number of local and regional organizations (four and one, respectively). Diversity was also seen in the types of organization, with greatest representation of civil society and government, and relatively equal representation of UN, network, and research organizations, respectively. The organization list was heavily faith-based, with 89 in

Table 2 A summary of 119 stakeholders identified by respondents

		Number of organizations	Percentage of total
Level	Local	4	3.4%
	National	29	24.4%
	Regional	1	0.8%
	International	85	71.4%
Type	Government	25	21.0%
	Civil society	44	37.0%
	UN	15	12.6%
	Network	17	14.3%
	Research	18	15.1%
	Private sector	0	0.0%
Faith	Faith based	89	74.8%
	Secular	30	25.2%

total (74.8%) falling into that category and 30 characterized as non-faith-based.

Results from the weighted out-degree centrality analysis provided insight into these stakeholders' roles in influencing the refugee policy network (Table 3 and Fig. 1).

With a score of 81, UNHCR was the organization with the highest weighted out-degree centrality, followed by local non-faith actors (score of 31) and the International Council of Voluntary Agencies (ICVA) (score of 25). Our 24 respondents collectively rated these organizations highly. Notably, two non-organizational groups of actors—local non-faith local actors and local faith actors—also had high weighted out-degree scores (scores of 31 and 25, respectively), signifying respondents' influence with these stakeholders. There was a mix of organizations by level and type; some were faith-based while others were not faith-based.

While out-degree centrality measures showed a variety of stakeholders exerting influence on the system, eigenvector values were more heavily dominated by large NGOs. Eigenvector centrality is shown in Table 4 and Fig. 2. As illustrated, World Vision had the highest eigenvector centrality (score of 1), with Islamic

Relief and Lutheran World Federation second (score of 0.94) and third (score of 0.86) respectively. All organizations were internationally focused, with heavy representation of civil society, and a mix of faith- and non-faith-based stakeholders.

As Table 5 and Fig. 3 shows, 15 actors had betweenness scores. Compared to eigenvector and out degree values, networks and consortia scored highly here—notably, the International Council of Voluntary Agencies (score of 0.034) and ACT Alliance (0.008), who worked closely with ICVA and others in Geneva to help coordinate efforts at key consultations. A few other prominent NGOs also scored highly, such as the International Rescue Committee—an organization particularly known for its advocacy for refugees (score of 0.016)—Save the Children (score of 0.014), and Islamic Relief Worldwide (score of 0.018). As with eigenvector, international organizations had high betweenness

Table 3 The out-degree centralities of identified stakeholders, ordered by weighted out-degree

Out-degree

Stakeholder	Level	Type	Faith-based?	Weighted out-degree	Unweighted out-degree
UN High Commissioner for Refugees	International	UN		81	20
Local non-faith actors	Local	Civil society		31	6
International Council of Voluntary Agencies	International	Civil society		27	8
Local faith actors	Local	Civil society	x	25	4
International Organization for Migration	International	UN		25	8
Holy See	International	Civil society	x	22	5
Refugee Council USA	National	Civil society		17	5
ACT Alliance	International	Civil society		16	5
Caritas Internationalis	International	Civil society		14	4
US Council of Catholic Bishops	National	Civil society		14	3
US Bureau of Population and Migration	National	Government		13	3
European Union	Regional	Government		12	3
International governments	International	Civil society		11	4
Islamic Relief Worldwide	International	Civil society	x	11	4
International Catholic Migration Commission	International	Civil society	x	11	3
UN Children's Fund	International	UN		11	3
International Rescue Committee	International	Civil society		10	3
JLI members	International	Civil society		10	2
Joint Learning Initiative on Faith and Local Communities	International	Civil society		9	2
UN Office of the High Commissioner for Human Rights	International	UN		8	3
US National Security Council	National	Government		8	2
Danish Refugee Council	International	Civil society		7	2
InterAction	International	Civil society		7	2
International Committee of the Red Cross	International	Civil society		7	2
International Labour Organization	International	UN		7	2
UN Office for the Coordination of Humanitarian Affairs	International	UN		7	2
United States Government	National	Government		7	2
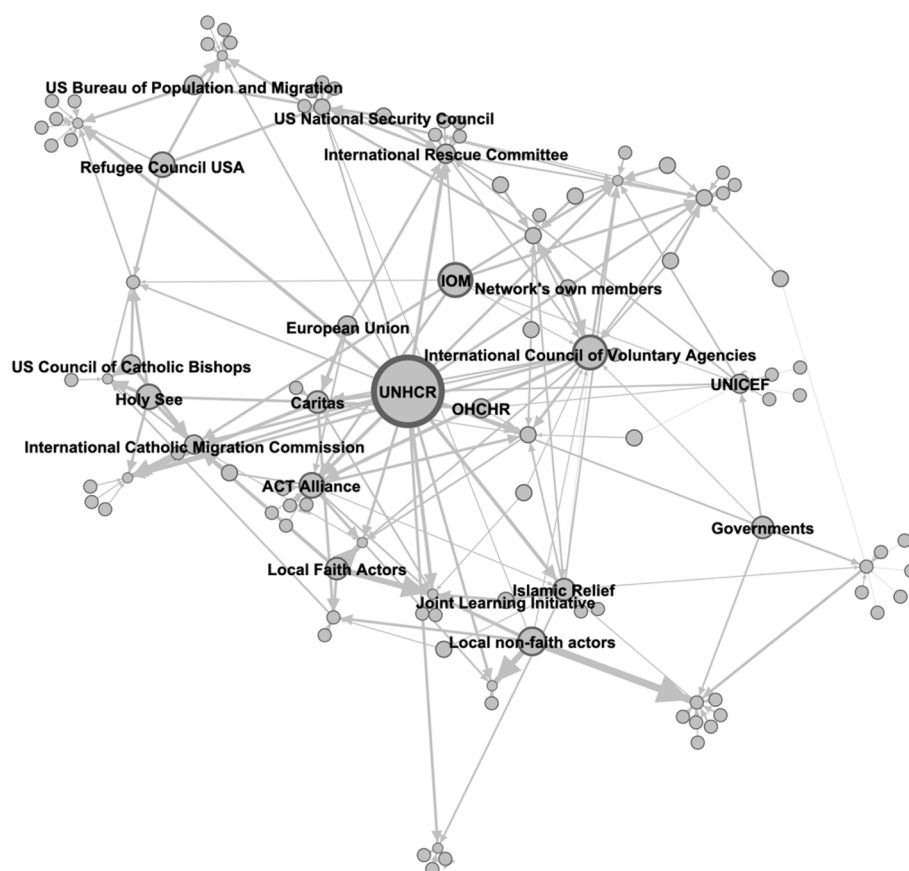
Fig. 1 Policy network showing out-degree centrality, with node size scaled by out-degree centrality scores

centralities among a mix of faith-based and non-faith-based actors.

Discussion

In this article, we set out to examine the JLI network of stakeholders involved in the GCR policymaking process and, in doing so, provide more insight into the networked governance of humanitarian policymaking. Results provide a snapshot of the network of influencers connected to faith actors, non-faith NGOs, and international agencies in 2018, a particularly influential year in refugee policy making marked by the formalization of the Global Compact on Refugees.

Many of our findings might be expected by someone with knowledge of the humanitarian system. For instance, UNHCR a highly influential player at the policymaking table, as indicated by its high out-degree centrality. This indicates that actors in the network ultimately looked to UNHCR for direction and cues. Yet, the analysis also presents nuance in some of the ways the network operates. This includes the power of NGOs to influence each other and the importance they put in relationships within their

own subnetworks, as shown by high eigenvectors and betweenness centralities of many international NGOs. They operated in collaboration and relationship with each other, showing that these actors care about their reputations with each other and are not only drawn to the central influence of UNHCR. They also collaborated across faiths, as seen by the links from Islamic Relief to several Christian organizations. Likewise, faith and non-faith actors influenced each other, with ICVA acting as a central point for these organizations to collaborate, as demonstrated by ICVA's high betweenness score.

Some organizations also had markedly different roles in the network; for instance, World Vision had high eigenvector scores but low betweenness scores, indicating that they were a significant player with potential to influence the policymaking network, but were not acting as a bridging organization bringing together disparate organizations. That role was filled by ICVA, which was shown as working as an advocacy network, and by JLI, represented among faith actors. Islamic Relief is represented relatively highly in both eigenvector and betweenness scores, indicating that it had power to influence others

Table 4 Eigenvector centralities of identified stakeholders

Eigenvector centrality

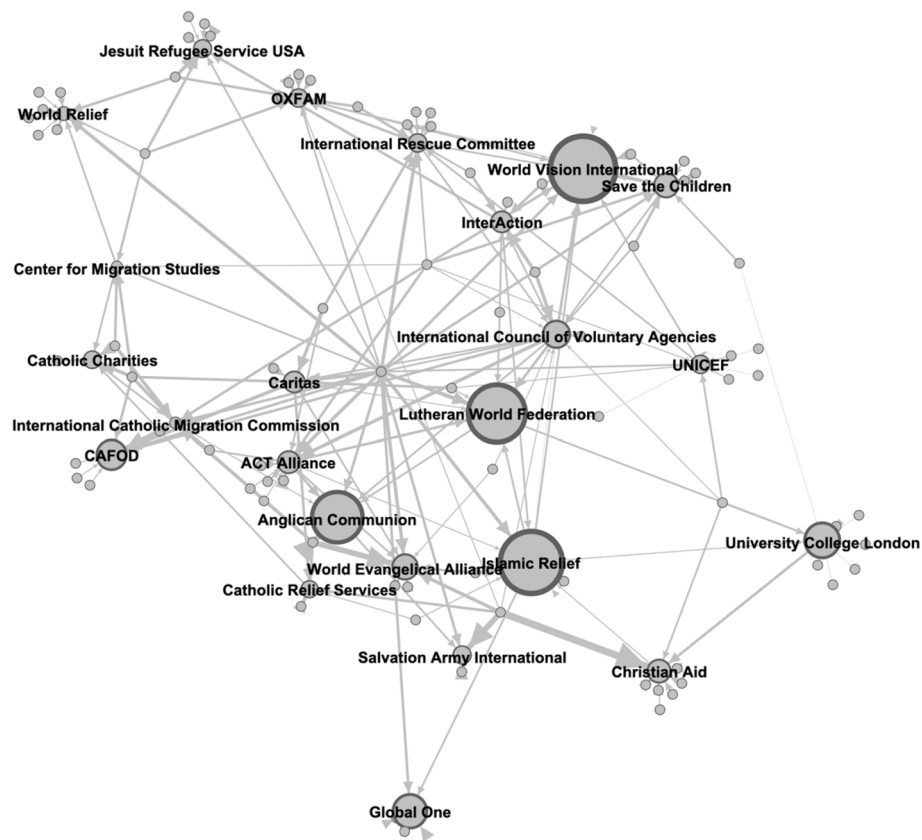| Stakeholder	Level	Type	Faith-based?	Eigenvector
World Vision International	International	Civil society	x	1
Islamic Relief Worldwide	International	Civil society	x	0.943657
Lutheran World Federation	International	Civil society	x	0.856422
Anglican Communion	International	Civil society	x	0.733489
University College London	International	Research		0.452295
Global One	International	Civil society		0.429863
Catholic Agency for Overseas Development	International	Civil society	x	0.358174
International Council of Voluntary Agencies	International	Civil society		0.309725
World Evangelical Alliance	International	Civil society	x	0.277372
Save the Children	International	Civil society		0.258342
Christian Aid	International	Civil society	x	0.238198
ACT Alliance	International	Civil society		0.220972
Caritas Internationalis	International	Civil society	x	0.203026
InterAction	International	Civil society		0.203026
UN Children's Fund	International	UN		0.151604
International Rescue Committee	International	Civil society		0.151604
Oxfam	International	Civil society		0.151604
Salvation Army International	International	Civil society	x	0.147514
Jesuit Refugee Service USA	International	Civil society	x	0.143317
Catholic Charities	International	Civil society	x	0.13726
Catholic Relief Services	International	Civil society	x	0.129858
World Relief	International	Civil society		0.072543
International Catholic Migration Commission	International	Civil society	x	0.031405
Center for Migration Studies	International	Research		0.022432

in the network and played a bridging role. In some ways, ICVA was the inverse of World Vision in that it had a lower eigenvector score but high betweenness, meaning it had a central role as a bridge but limited power in influencing the other NGOs. ICVA was the conduit of influence, rather than the key influencer itself.

One of the outcomes of the network demonstrated by this SNA was advocacy around the wording of key clauses in the GCR to describe "local actors" and "faith-based actors" (the exact terms eventually used in the GCR) as stakeholders involved in the implementation of the GCR. The recognition and wording of clauses on "faith-based actors" and "local actors" in the GCR was a significant accomplishment for the advocacy work of the faith actors and non-faith colleagues represented in this SNA (for the faith actors, their worldwide membership is often made up of local, faith actors and thus combines these two categories). However, the description of both local and faith-based actors that ended up in the final policy document has been criticized as "tantalizingly and frustratingly brief and abrupt" (Wurtz and Wilkinson, 2020).

Our snapshot shows the importance of central networking organizations, such as ICVA, to help bring influencers together for greater impact. The other actors in the sample looked to ICVA to help organize their joint influencing efforts. This depiction shows a certain effectiveness in ICVA's role in formal consultation processes, in which it acts as a centrally organized representative to assist individual NGOs that are unable to state their positions separately due to the rules of formal consultations in this policy process. Furthermore, eigenvector values show which organizations placed notable effort on influencing and networking, with World Vision demonstrating its widespread outreach and connectedness. This may be predictable to someone with knowledge of the humanitarian system, given the size of World Vision in comparison to most other NGOs. Nevertheless, it also represents World Visions' interest and concern for children in migratory conditions as a significant area of the organizations' advocacy work in collaboration with other faith actors (World Vision, 2022).

The results also highlight who might be missing from these policy conversations. The private sector was notably absent from the results. Similarly, local actors, though
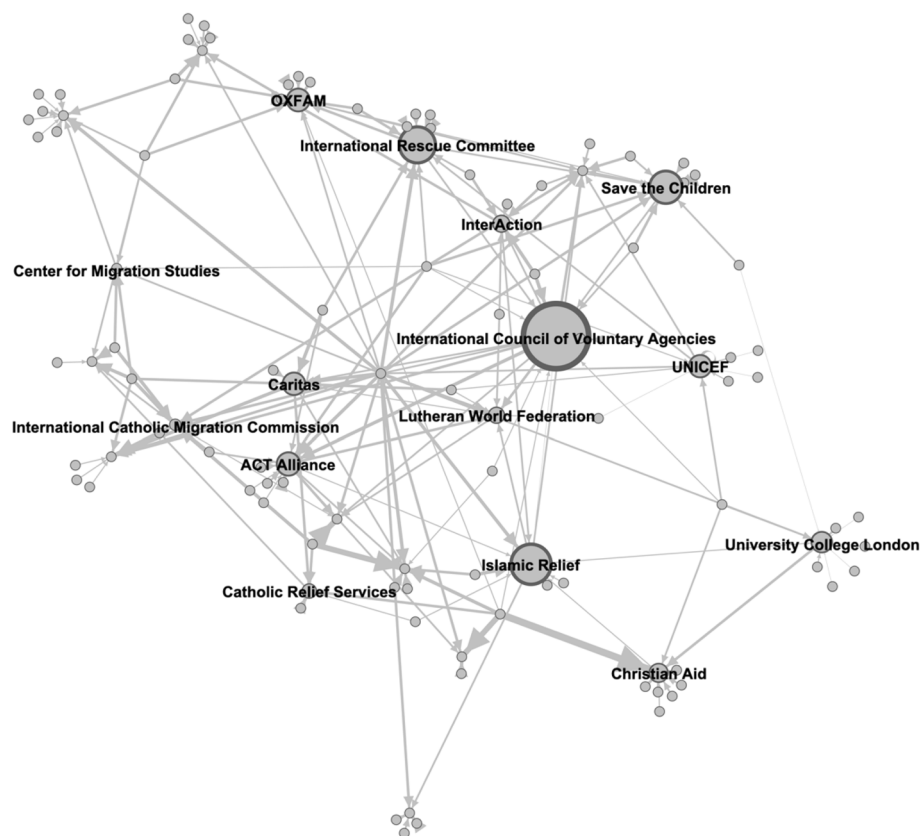
Fig. 2 Policy network showing eigenvector centrality, with node size scaled by eigenvector centrality scores

Table 5 Betweenness centralities of identified stakeholders

Betweenness centrality

Stakeholder	Level	Type	Faith-based?	Betweenness
International Council of Voluntary Agencies	International	Network		0.033898
Islamic Relief	International	Civil society	x	0.018543
International Rescue Committee	International	Civil society		0.016116
Save the Children	International	Civil society		0.013955
ACT Alliance	International	Network		0.008263
Oxfam	International	Civil society		0.007980
Caritas	International	Civil society	x	0.007786
UN Children's Fund	International	UN		0.007714
University College London	International	Research		0.006664
Christian Aid	International	Civil society	x	0.005396
InterAction	International	Network		0.004292
Lutheran World Federation	International	Network	x	0.003803
Catholic Relief Services	International	Civil society	x	0.002789
International Catholic Migration Commission	International	Civil society	x	0.00093
Center for Migration Studies	International	Research		0.000217

Fig. 3 Policy network showing betweenness centrality, node size scaled by betweenness centrality scores

somewhat shown to be connected through out-degree analysis, occupied a peripheral role in core discussions (as indicated by eigenvector centralities) and were not critical connectors within the policymaking network.

These results align with, but also appear to challenge, some of the broader discussions of networked humanitarian governance. Among such discussions, this study contributes evidence relating to the multifaceted nature of governance, particularly the growing and increasingly dispersed forms of power. For instance, Barnett (2013) points out that, while the Global North maintains much of the control within global humanitarian architecture—reflected in this instance by the prevalence of international organizations—there is emerging room for growth, reflected by the 'local' stakeholders identified in this study. But the lack of engagement with other stakeholders, such as the private sector, shows stymied progress towards networked humanitarian governance.

The limitations of the network shown by our analysis—namely the narrow engagement of private or local actors—may or may not be problematic from a perspective of networked governance and equity. The lack of influence with local actors, as evidenced by

their eigenvector scores, might pose a challenge in expanding the procedural equity within the humanitarian policymaking apparatus or limit the effectiveness of interventions with local character. However, the observed roles of local actors as 'bridges,' shown by betweenness measures, might amplify networked organizations with positionality in the system as facilitators of solutions to those procedural equity and effectiveness challenges. Likewise, the network's lack of engagement with private sector actors might mean the GCR and the JLI network are not beholden to commercialized or profit-minded influences. Thus, the findings of this study do not point toward a need for a 'complete' network but rather a network that is fit for, and designed to complete, its policy objectives.

The choices we made in characterizing network respondents were designed to provide insight relevant to ongoing discussions related to stakeholder involvement in humanitarian sectors, including those related to the role of the private sector, the localization agenda, and how faith shapes humanitarian responses. Our categorization choices helped "make legible" (Scott, 1998) these organizational types, and result in a particular framing of

the humanitarian system—one comprised of organizations of different levels, types, and faiths. Other choices could have made legible other elements of the humanitarian network and made ours illegible, resulting in potentially markedly different networks and results.

As an example of the effects of these framing choices, removing information on faith-based and non-faith-based organizations would not have allowed us to 'see' the role of faith in networked humanitarian policymaking. Similarly, weighting betweenness scores helped reflect how much of a bridge organizations provided, useful in policymaking processes where trust and collaboration are key; keeping betweenness scores unweighted might have reflected ideas that having connections, rather than the nature of those connections, is what matters (Granovetter (1973) ideas of weak ties). This could be useful but also potentially result in tokenistic or 'flat' views of power and participation (Arnstein, 1969).

Such discussion suggests that, for this study, results should be interpreted as providing a *perspective* on the humanitarian policymaking network rather than capturing *the* humanitarian policymaking network. Indeed, the centrality of choice in shaping results aligns with critically oriented disaster research that points to the role of power and marginalization in shaping both disaster and our perceptions on its governance (Chambers, 1997; Wisner et al. 1977; Remes and Horowitz, 2021; Gaillard, 2018; Oliver-Smith, 2022).

Overall, these results demonstrate some of the value of SNA in understanding how humanitarian action-related policies are crafted as part of networked governance policymaking. Humanitarian policymaking is ultimately a messy and complex process, involving many stakeholders who cooperate and compete to shape policy outcomes. Such complexity can be difficult for researchers and policymakers to analyze, resulting in policy advocacy processes that might be ineffective or otherwise less than ideal, and research that may not be focused on the right sets of relations or stakeholders.

The SNA that we undertook to understand the GCR was relatively straightforward, involving a survey and simple analysis using an easy-to-use and free software. By validating some expectations and adding nuance to others, we were able to show the utility of SNA as a method of policy analysis without a need for complicated and expensive research activities. Thus, we reiterate broader calls to engage in SNA-related work as a crucial method in disaster and humanitarian contexts (Jones and Faas, 2017) while also pushing for a specific call on the need for a focus on humanitarian-related policy, given the power of global humanitarian policy to shape local resources.

Future work should also engage in forging a deeper understanding of these network-based forms of humanitarian policymaking, analyzing when and how conceptualizing these systems as social networks is useful and in what ways such conceptualization might falter (Barnett, 2013). That future work should also place attention on how organizations come to occupy specific roles in the policymaking network and what the implications might be when it comes to crafting humanitarian policy. How can organizations such as JLI maximize bridging opportunities among the actors in their network? How can the unique positions of organizations, such as those occupied by ICVA and World Vision in this network, be used to craft better humanitarian policy? Answering these questions may result findings that could help improve the networked policymaking process.

We hope that other policymaking organizations and researchers can use similar techniques to understand how to improve the impact of their advocacy in policymaking circles. This might be particularly useful for other less well-known or well-established and politically charged policymaking arenas. Climate change-related migration is such an arena, as organizations such as the UNHCR continue to focus on climate change-related migration at a global level while cities and states continue to build out their climate migration-related policies at the sub-global level (Blake et al. 2021). Given the murkiness of climate change-related migration as both a concept and policy issue (Boas et al. 2019; Kelman, 2019), coupled with its growing policy focus, studying the topic area as a networked policymaking process, and potentially using the tools of SNA, might help improve how climate change migration-related policy develops and the impact that it has on humanitarian action.

Like every other social network analysis study, our study has limitations. The sampling strategy limited the organizations to those connected to the JLI network, meaning faith-based actors are particularly represented. Some organizations surveyed were networks of other actors; in that sense, they also represent a broader diversity of other organizations that are not individually represented in this sample. However, our sampling strategy was limited, resulting in a certain view of the network. An example of how this affected our results is our betweenness centrality measures, where every organization with high betweenness was also one of our respondents. Our respondents, by definition, were the connectors creating this network, giving them relatively higher betweenness compared to

non-respondents. A wider sample or probability-based sampling technique for representativeness and a new data collection period could be conducted to further these findings and add new insights in the period following the adoption of the GCR in 2018 to more deeply understand if the GCR has produced shifts in influence among relevant actors.

Conclusions

The purpose of this article was to examine who was involved in the Global Compact on Refugees and, in so doing, gain insight into a notable networked governance humanitarian policy process. To do so, we undertook an SNA of the stakeholders involved in the GCR. The results show the centrality of certain stakeholders and stakeholder types—UN, international NGOs, certain faith actors—and the peripheral status of others—local actors and the private sector. Therefore, one contribution of this work is to re-emphasize the importance of a thorough understanding of policymaking networks to facilitate effective and efficient processes. The study also shows how efforts to use SNA may contribute to policy agendas. Stakeholder mapping initiatives, such as the social network analysis used in this study, can help policymakers better understand their own policymaking process, with our contribution standing as a proof of concept.

Abbreviations
GCR: Global Compact on Refugees; JLI: Joint Learning Initiative on Faith and Local Communities; SNA: Social network analysis; UNHCR: United States High Commissioner for Refugees.

Authors' contributions
Aaron Clark-Ginsberg: conceptualization, methodology, analysis, writing, funding acquisition. Jay Balagna: writing. Cyd Stacy Nam: investigation, project administration, funding acquisition. Maya Casagrande: investigation. Olivia Wilkinson: conceptualization, methodology, analysis, writing, funding acquisition, supervision. All authors read and approved the final manuscript.

Availability of data and materials
Data is available upon request.

Declarations

Competing interests
The authors declare that they have no competing interests.

Author details
[1]RAND Corporation, Santa Monica, CA, USA. [2]Pardee RAND Graduate School, Santa Monica, CA, USA. [3]Mennonite Central Committee, Chuncheon-Si, South Korea. [4]Joint Learning Initiative, Washington, DC, USA.

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